

METHOD AND APPARATUS FOR CALCULATING BLOOD FLOW PARAMETERS

ABSTRACT OF THE DISCLOSURE

A method for determining tissue type includes quantitatively determining a tissue blood flow (TBF) by deconvoluting $Q(t)$ and $C_a(t)$, where $Q(t)$ represents a curve of specific mass of contrast, and $C_a(t)$ represents an arterial curve of contrast concentration, and quantitatively determining a tissue blood volume (TBV) by deconvoluting $Q(t)$ and $C_a(t)$. The method also includes quantitatively determining a tissue mean transit time (TMTT) by deconvoluting $Q(t)$ and $C_a(t)$, and quantitatively determining a tissue capillary permeability surface area product (TPS) by deconvoluting $Q(t)$ and $C_a(t)$. The method also includes determining a tissue type based on the TBF, the TBV, the TMTT, and the TPS.